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SYSTEM FOR CORRELATION OF MR IMAGES WITH PHYSIOLOGICAL DATA

5 ABSTRACT OF THE DISCLOSURE

An MR system correlates MR images with acquired physiological data. MR image data and physiological data is acquired through two independent pipelines. Both pipelines range from analog to digital conversion to image or data display. The pipelines are synchronized by triggers calculated from data contained in the physiological pipeline which are then used to trigger the acquisition of data in the MR image pipeline. Another embodiment includes time synchronization of a distributed acquisition and processing system having the ability to correlate physiological and MR data using a common time base and the ability to selectively store physiological data. Simplified network time protocol is used to synchronize timers and a separate data conduit is used for sending physiological data to the data store process. This supports different modes of synchronization between acquisition and the physiological signal.